

Maths Share

ALGEBRA

Number cruncher

U62

You will need

paper
pen or pencil

What to do

You are helping to test the marvellous number cruncher machine for the inventor, Mrs Boffin. The machine does some amazing calculations.

Mrs Boffin explains, 'Last night the machine changed 5 into 12.

First the 5 was **multiplied** by 4 to make 20.

Then the 20 was **divided** by 5 to make 4.

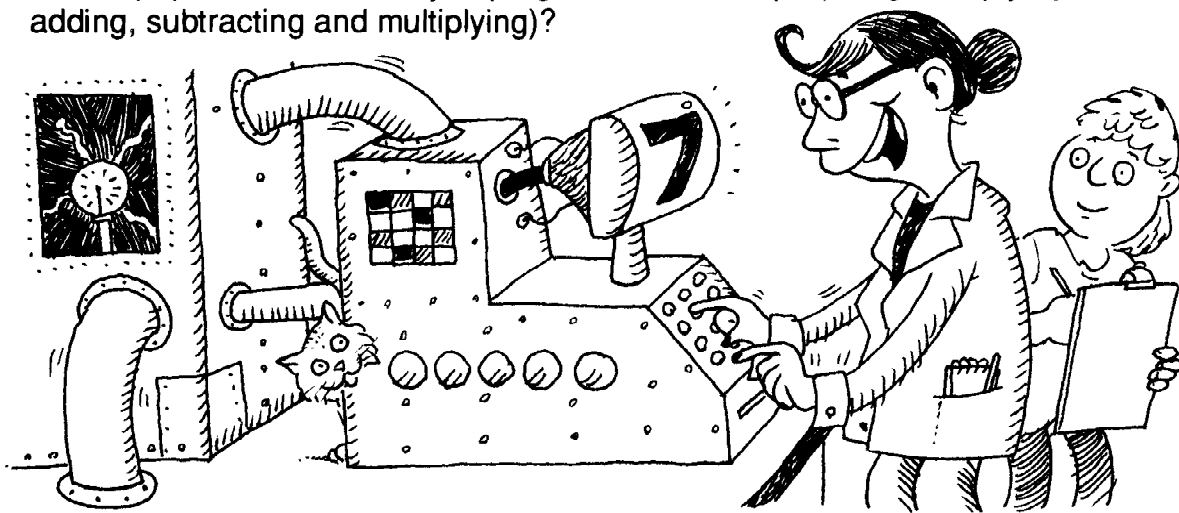
Next the 4 was **added** to by 15 to make 19.

Finally, the 19 had 7 **subtracted** from it to make 12.'

Put the number 8 in the number cruncher machine. After going through the maths 4 processes of multiplication, addition, subtraction and division, the number 64 pops out.

What's going on inside? Which 4 computations made 8 change to 64? (And could it eventually work for chocolates or sweets making 8 into 64?)

Now put the number 25 into the machine. Four steps later the number 30 should pop out. How would you program those 4 steps (using multiplying, adding, subtracting and multiplying)?



WHERE'S THE MATHS?

Pattern, problem solving, the basic number processes.